YORK®
Heating and Air Conditioning

TECHNICAL GUIDE

SINGLE PIECE VARIABLE SPEED AIR HANDLERS

FOR USE WITH SPLIT-SYSTEM COOLING & HEAT PUMPS

MODELS: AVY24 THRU 60 AND SVY48 THRU 60

ISO 9001
Certified Quality
Management System

Due to continuous product improvement, specifications are subject to change without notice.

Visit us on the web at www.york.com

Additional rating information can be found at www.ahridirectory.org.

DESCRIPTION

The Affinity Air Handler line offers the ultimate in comfort, sound and application flexibility. The Affinity models utilize a whisper quiet variable speed motor that provides humidity control and the lowest operating cost in the industry. The AVY air handler is shipped ready to be installed in all positions, upflow, downflow, horizontal left or right, with minor adjustments. The SVY 48 & 60 models are upflow only models designed into a shorter cabinet, for those special applications where reduced height is required. No special kits are required to install this deluxe product in any position.

All JCI Unitary Products air handlers and coils use a TXV to provide our customers with the optimum performance and refrigerant control required for 13 + Seer systems. Air handlers can be ordered with either a R-22 or R-410A TXV factory installed. Air handlers are also available with “Flex-coils” without a factory installed metering device, where for added flexibility, a R-22 or R-410A TXV can be field installed to meet your refrigerant choice.

FEATURE

Thermal Expansion Valve - Provides the ultimate refrigerant control required for today’s high efficient product. The UPG bolt-on TXV provides easy installation to convert the air handler to the required refrigerant, which is a true bolt-on design that does not require brazing to replace or install.

MicroBlue™ Coated Fins - All air handler coils are treated with the MicroBlue™ hydrophilic coating to enhance the removal of condensate during the refrigeration cycle and reduce the possibility of water blow-off. The MicroBlue™ coating also reduces the growth of germ causing microbes for a healthier home environment.

Insulated Cabinet - All air handler cabinets are thermally insulated with 1” foil faced insulation (R-4.2) to prevent sweating. For applications in extreme humidity conditions an optional, field installed, external insulating wrap kit is also available.

Factory - Sealed to achieve 2% or less leakage rate with or without field installed filter at 1.0” water gauge external static pressure.

Durable Finish Inside and Out - Air handler casings are made of pre-painted galvanized steel which provides a better paint to steel bond that resists corrosion and rust creep. All internal coil sheet metal parts are made of G90 galvanized.

New 4 HK Heat Kit - Installation friendly, easy service, more robust, unique to new design.

ECM Variable Speed Motor - Designed for efficient, quiet operation with added indoor comfort control. With the use of a humidistat, the motor will monitor the humidity in the home and automatically keep the desired humidity level in both winter and summer seasons. The ECM motor utilizes only 24% of the energy used by standard blower motors to reduce your overall heating and cooling costs.

ClimaTrak Comfort Settings - Installers can set an operating cycle for the ECM motor that works best in a particular climate. Homeowners benefit from an operating cycle that maximizes their indoor comfort level regardless of whether they live in a dry, temperate, or humid climate.

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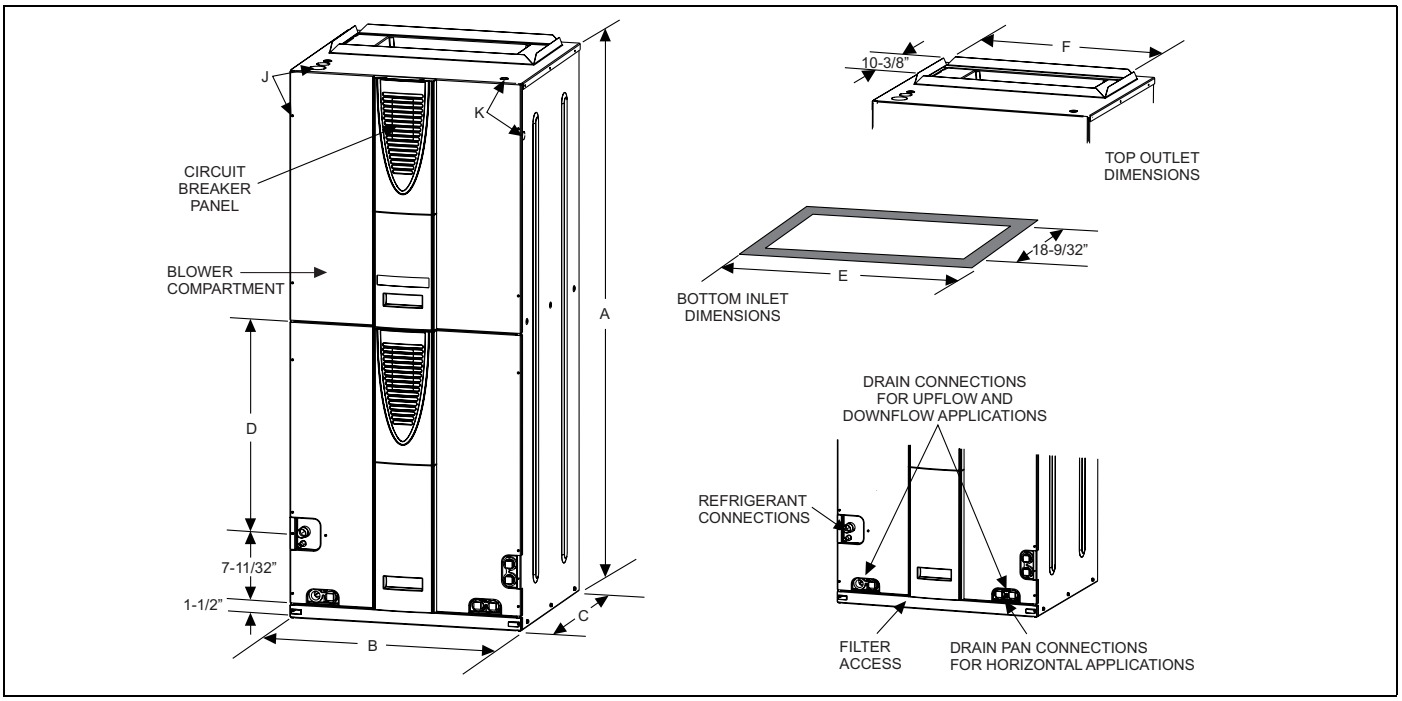
DIMENSIONS



DIMENSIONS

Models	Dimensions (Inches)						Wiring Knockouts[1]		Refrigerant Connections Line Size	
	A	B	C	D	E	F	J	K		
	Height	Width	Depth				Power	Control	Liquid	Vapor
AVY24B**H21	46	17.5	21.5 (w/o cladding) 22.5 (with cladding)	12-3/8	13-29/32	14-19/32	7/8" (1/2") 1 3/8" (1") 1 23/32" (1 1/4")	7/8" (1/2")	3/8"	3/4"
AVY36C**H21	52	21		17-1/8	17-13/32	18-3/32				7/8"
AVY48D**H21	57	24.5		22-1/8	20-29/32	21-19/32				7/8"
SVY48D**N21	52	24.5		17-1/8	20-29/32	21-19/32				7/8"
AVY60D**H21	57	24.5		22-1/8	20-29/32	21-19/32				7/8'
SVY60D**N21	52	24.5		17-1/8	20-29/32	21-19/32				7/8"

1. Actual size (Conduit size).

** Thermal expansion device indicators - "2_" indicates R-22 TXV is factory installed, "3X" indicates unit is a "Flex Coil" models with a field installed R-22 or R-410A TXV, and "4_" indicates R-410A TXV is factory installed. Letter indicates TXV size as required, see outdoor unit technical information for proper matches and requirements.

COIL TECHNICAL DATA

Models	Application	Refrig. Conn. Types	Face Area (Sq. Ft.)	Rows Deep	Fin Per In.	Coil Size	Tube Geometry	Tube Dia.	Fin Type	TXV
AVY24B3XH21	Cooling / Heat Pump	Sweat	3.89	2	14	(2) 16 x 17.5	1 x 0.866	3/8	Enhanced	None
AVY24B2AH21										2A
AVY24B4EH21										4E
AVY24B4FH21										4F
AVY24B4KH21										4K
AVY36C3XH21	Cooling / Heat Pump	Sweat	4.86	3	12	(2) 20 x 17.5	1 x 0.866	3/8	Enhanced	None
AVY36C2AH21										2A
AVY36C4EH21										4E
AVY36C4FH21										4F
AVY36C4GH21										4G
AVY36C4HH21										4H
AVY36C4KH21										4K
AVY36C4MH21										4M
AVY48D3XH21	Cooling / Heat Pump	Sweat	5.83	3	11	(2) 24 x 17.5	1 x 0.866	3/8	Enhanced	None
AVY48D2CH21										2C
AVY48D4FH21										4F
AVY48D4HH21										4H
AVY48D4JH21										4J
AVY48D4KH21										4K
SVY48D3XN21										None
SVY48D2CN21										2C
AVY60D3XH21	Cooling / Heat Pump	Sweat	5.83	3	11	(2) 24 x 17.5	1 x 0.866	3/8	Enhanced	None
AVY60D2CH2										2C
AVY60D4HH21										4H
AVY60D4JH21										4J
AVY60D4KH21										4K
SVY60D3XN21										None
SVY60D2CN21										2C

Note: H models are available with a factory installed horizontal drain pan.

COOLING CAPACITY

Models	Rated CFM	Entering Air °F (Dry / Wet Bulb)	MBH@ Evaporator Temperature and Corresponding Pressure °F / PSIG			
			35 / 61.5	40 / 68.5	45 / 76.0	50 / 84.0
FULL-CASED "A" TYPE MULTI-POSITION						
AVY24B**H21	800	85/72	35.0	31.8	28.4	24.7
		80/67	32.2	29.1	25.7	22.3
		75/62	26.4	23.4	21.0	17.1
		70/57	21.4	18.6	20.2	12.1
AVY36C**H21	1200	85/72	51.3	46.7	41.7	36.8
		80/67	41.1	36.3	31.8	27.1
		75/62	32.1	27.0	29.4	21.9
		70/57	27.6	25.4	23.5	18.3
AVY48D**H21 SVY48D**N21	1600	85/72	100.5	86.4	72.0	56.8
		80/67	80.4	67.5	55.0	42.1
		75/62	62.7	49.9	40.7	34.0
		70/57	53.9	47.2	36.81	28.71
AVY60D**H21 SVY60D**N21	1850	85/72	119.9	101.0	82.0	62.2
		80/67	96.0	79.2	62.6	45.8
		75/62	74.8	58.6	46.2	37.0
		70/57	64.3	55.4	43.2	33.7

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